What Is Claimed Is:

1. An electromagnetic (EM) shielding composite comprising a polymer and an amount effective for EM shielding of nanotubes, wherein said composite has low or essentially no bulk conductivity.

2. An electromagnetic (EM) shielding composite according to claim 1, wherein said composite has low reflectance for electromagnetic radiation.

3. An electromagnetic (EM) shielding composite according to claim 1, wherein said composite has a low radar profile.

4. An electromagnetic (EM) shielding composite comprising a polymer having a given bulk conductivity and an amount effective for EM shielding of nanotubes, wherein said shielding composite has substantially the same bulk conductivity as that of said polymer.

5. An electromagnetic (EM) shielding composite comprising a polymer and an amount effective for EM shielding of nanotubes, wherein said nanotubes are substantially aligned to optimize the EM shielding effect.

6. An electromagnetic (EM) shielding composite comprising a polymer and an amount effective for EM shielding of nanotubes, wherein said nanotubes are substantially disentangled to optimize the EM shielding effect.

7. An electromagnetic (EM) energy absorbing composite comprising a polymer and nanotubes in an amount effective for EM energy absorption, greater in degree than the amount of EM energy reflected from said composite.

8. An electromagnetic (EM) shielding composite comprising a polymer and an amount effective for EM shielding of nanotubes, wherein shielding is achieved primarily by absorption of electromagnetic energy.

9. An electromagnetic (EM) shielding composite comprising a polymer and an amount effective for EM shielding of nanotubes, wherein said composite is subjected to shearing to enhance its EM shielding property.

10. An electromagnetic (EM) shielding composite of claim 4, wherein said nanotubes are distributed homogeneously within said polymer.

11. An electromagnetic (EM) shielding composite of claim 4, wherein said composite has been subjected to shearing.

12. An electromagnetic (EM) shielding composite of claim 4, wherein said composites have been subjected to a treatment which increases their alignment.

13. An electromagnetic (EM) shielding composite of claim 4, wherein said shearing process increases the alignment of the nanotubes.

14. An electromagnetic shielding composite, comprising: nanotubes mixed in a polymer, wherein the composite is primarily absorptive as opposed to primarily reflective and is effective for shielding broadband electromagnetic radiation.

15. The electromagnetic shielding composite according to claim 14, wherein the amount of said nanotubes is from 0.001 to 15 weight percent of the composite.

16. The electromagnetic shielding composite according to claim 14, wherein said broadband electromagnetic radiation is from 10^3 Hz. to 10^{17} Hz.

17. The electromagnetic shielding composite according to claim 14, wherein said broadband electromagnetic radiation is from 20 KHz. to 1.5 GHz.

18. The electromagnetic shielding composite according to claim 14, wherein said nanotubes have a length-to-diameter aspect ratio of at least 100:1.

19. The electromagnetic shielding composite according to claim 14, wherein said polymer is a thermoplastic polymer.

20. The electromagnetic shielding composite according to claim 14, wherein said polymer is a thermoset polymer.

21. A method of enhancing the EM shielding effectiveness of a composite of a polymer and nanotubes which comprises subjecting the composite to a shearing treatment which enhances said EM shielding effectiveness.

22. A microwave susceptor comprising a polymer and an amount of nanotubes effective for absorption of microwave energy

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